



<210> 2  
<211> 29  
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<400> 2  
ggcgctgcag ggcgctgatg atgttggtg 29

<210> 3  
<211> 36  
<212> DNA  
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<400> 3  
ggcgaagctt ggatccgaca cgatttcctg cacagg 36

<210> 4  
<211> 68  
<212> DNA  
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<220>  
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<400> 4  
aattctctag atgcttcacc cgggcctgac tcgagtacta actggtacct cttctttttt 60  
ttcctgca 68

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<220>  
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<210> 6  
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<220>  
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<400> 6  
tcgagcaacg ttataataat gttc 24

<210> 7  
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 <210> 10  
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 <212> DNA  
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 <400> 10  
 tgcttcaccc ggcctga 18  
  
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 <212> DNA  
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 ctcttctttt ttttcc 16

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caacgttata ataatggt	18
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ctgtgattaa tagcgg	16
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cctggacgcg gaagtt	16
<210> 15	
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ctgggacaag gacactgctt cacccggtta gtagaccaca gccctgaagc c	51
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cttctgtttt ttttctc	17
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<400> 17	
cttctgtatt attctc	16
<210> 18	
<211> 16	

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<212> DNA
<213> Homo sapien
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<400> 18
gtttctgtcct tgtctc                                16
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<210> 19
<211> 29
<212> DNA
<213> Corynebacterium diphtheriae
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```
<400> 19
ggcgctgcag ggcgctgatg atgttgttg                29
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```
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<211> 36
<212> DNA
<213> Corynebacterium diphtheriae
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<400> 20
ggcgaagctt ggatccgaca cgatttcctg cacagg          36
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```
<210> 21
<211> 21
<212> DNA
<213> Corynebacterium diphtheriae
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<400> 21
catcgtcata atttccttqt g                                     21
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<210> 22
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<213> Corynebacterium diphtheriae
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<400>_22
atggaatcta cataaccagg                                     20
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<210> 23
<211> 20
<212> DNA
<213> Corynebacterium diphtheriae
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<400> 23
gaaggctgag cactacacgc                20
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<211> 20
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<400> 24  
cggcaccgtg gccgaagtgg 20

<210> 25  
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<400> 25  
accggaattc atgaagccag gtacaccagg 30

<210> 26  
<211> 20  
<212> DNA  
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<400> 26  
gggcaagggtg aacgtggatg 20

<210> 27  
<211> 19  
<212> DNA  
<213> Homo sapien

<400> 27  
atcaggagtg gacagatcc 19

<210> 28  
<211> 39  
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<210> 29  
<211> 36  
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<220>  
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<400> 29  
ctgaggatcc tcttacctgt aaacgcccat actgac 36

<210> 30  
<211> 38  
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<220>  
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<400> 30  
gcatggtaac cctgcagggc ggcttcgtct gggactgg

38

<210> 31  
<211> 38  
<212> DNA  
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<220>  
<223> Oligonucleotide primer

<400> 31  
ctgaaagctt gttaacttat tatttttgac accagacc

38

<210> 32  
<211> 47  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 32  
gcatggtaac cctgcagggc ggcttcgtct aataatggga ctgggtg

47

<210> 33  
<211> 37  
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<220>  
<223> Oligonucleotide primer

<400> 33  
gcatggatcc tccggagggc ccctgggcac cttccac

37

<210> 34  
<211> 38  
<212> DNA  
<213> Artificial Sequence

<220>

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38

38

35

35

37

37

22

22

21

21



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<211> 20
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<213> Artificial Sequence
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<220>  
<223> Oligonucleotide primer

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<400> 39
cggcaccgtg gccgaagtgg                20
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<210> 40
<211> 45
<212> DNA
<213> Homo sapien
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<400> 40
acctgggccc acccattatt aggtcattat ccgcggaaca ttata 45
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<210> 41
<211> 35
<212> DNA
<213> Homo sapien
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<400> 41
acctctgcag gtgaccctgc aggaaaaaaaa aqaag 35
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<210> 42
<211> 30
<212> DNA
<213> Homo sapien
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```
<400> 42
acctctgcag acttcacttc taatgatgat 30
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<210> 43
<211> 51
<212> DNA
<213> Homo sapien
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<400> 43  
acctgcggcc gcctaataatgat gatgatgatg atgctcttct agttggcatg c 51

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<210> 44
<211> 32
<212> DNA
<213> Homo sapien
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<400> 44
gacctctcga gggatttggg gaattatttg ag 32
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<210> 45  
<211> 35  
<212> DNA  
<213> Homo sapien

<400> 45  
ctgacctgcg gccgctacag tggttgaatgt ggtgc

35

<210> 46  
<211> 35  
<212> DNA  
<213> Homo sapien

<400> 46  
ctgacctgcg gccgccaac tatctgaatc atgtg

35

<210> 47  
<211> 32  
<212> DNA  
<213> Homo sapien

<400> 47  
gacctcttaa gtagactaac cgattgaata tg

32

<210> 48  
<211> 21  
<212> DNA  
<213> Homo sapien

<400> 48  
ctaatgatga tgatgatgat g

21

<210> 49  
<211> 21  
<212> DNA  
<213> Homo sapien

<400> 49  
cgcctaata ga tgatgatgat g

21

<210> 50  
<211> 21  
<212> DNA  
<213> Homo sapien

<400> 50  
cttcttggtg ctcctgtcct g

21

<210> 51  
<211> 32

<212> DNA  
<213> Homo sapien

<400> 51  
gacctctcga gggatttggg gaattatttg ag 32

<210> 52  
<211> 21  
<212> DNA  
<213> Homo sapien

<400> 52  
aactagaagg cacagtcgag g 21

<210> 53  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Trans-spliced product containing humanchorionic  
gonadotropin gene 6 sequences and Corynebacterium  
diphtheriae toxin A sequence

<400> 53  
gagatgttcc agggcgtgat gatg 24

<210> 54  
<211> 127  
<212> RNA  
<213> Artificial Sequence

<220>  
<223> PTM intramolecular base paired stem

<221> unsure  
<222> (57)...(70)  
<223> A, C, G or U

<221> misc\_feature  
<222> (57)...(70)  
<223> Loop comprising a combination of 14 nucleotides

<400> 54  
gcuagccugg gacaaggaca cugcuucacc cgguaguag accacagccc ugagccnnnn 60  
nnnnnnnnnn aucguuaacu aauaaacuac uaacugggug aacuucuguu uuuuucucga 120  
gcugcag 127

<210> 55  
<211> 127

<220>  
<223> Trans-spliced product containing human chorionic gonadotropin gene 6 sequences and *Corynebacterium diptheriae* diptheria toxin A sequences

<400> 57

caggggacgc accaaggatg gagatgttcc agggcgctga tgatgttggt gattcttctt 60  
aaatcttttg tgatggaaaa cttttcttcg taccacggga ctaaacctgg ttatgtagat 120  
tccattcaaa aa 132

<210> 58

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial Sequence derived from Escherichia coli  
lacZ gene

<400> 58

gaattcggta ccatgggg 18

<210> 59

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial Sequence derived from Escherichia coli  
lacZ gene

<400> 59

cgtttacagg taagaggatc ctccggaggg ccc 33

<210> 60

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Artificial Sequence derived from Escherichia coli  
lacZ gene

<400> 60

tggtgtcaaa aataataagt taacaagctt 30.

<210> 61

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Trans-spliced product containing Escherichia coli  
lacZ gene sequences and human chorionic  
gonadotropin gene 6 exon 2 sequences

<400> 61  
cagcagcccc tgtaaacggg gatac

25

<210> 62  
<211> 286  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Trans-spliced product containing Escherichia coli  
lacZ gene sequences

<400> 62  
ggctttcgct acctggagag acgcgcccgc tgatcctttg cgaatacgcc cacgcgatgg 60  
gtaacagtct tggcgggttc gctaaatact ggcaggcggt tcgtcagtat ccccgtttac 120  
agggcggcct cgtctaataa tgggactggg tggatcagtc gctgattaaa tatgatgaaa 180  
acgggcaacc cgtggtcggc ttacggcggg gattttggcg atacgccgaa cgatcgccag 240  
ttctgtatga acggtctggt ctttgccgac cgcacgccgc atccag 286

<210> 63  
<211> 196  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Trans-spliced product containing Escherichia coli  
lacZ gene sequences

<400> 63  
ggctttcgct acctggagag acgcgcccgc tgatcctttg cgaatacgcc cacgcgatgg 60  
gtaacagtct tggcgggttc gctaaatact ggcaggcggt tcgtcagtat ccccgtttac 120  
aggggctgct gctgttgctg ctgctgagca tgggcgggac atgggcatcc aaggagccac 180  
ttcgccacg gtgccg 196

<210> 64  
<211> 420  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Trans-spliced product containing cystic fibrosis  
transmembrane regulator-derived sequences and  
His-tag sequence

<400> 64  
gctagcgttt aaacggggccg acccatcatt attaggtcat tatccgcgga acattattat 60  
aacgttgctc gactactaac tggaacctct tctttttttt cctgcagact tcacttctaa 120  
tgatgattat gggagaactg gagccttcag agggtaaaat taagcacagt ggaagaattt 180  
cattctgttc tcagttttcc tggattatgc ctggcaccat taaagaaaat atcatctttg 240

gcggccgcca ctgtgctgga tatctgcaga attccaccac actggactag tggatccgag 300  
 ctcggtacca aggttaagtt taaaccgctg atcagcctcg actgtgcctt ctagttagcca 360  
 gccatctggt gtttgccct cccccgtgcc ttccttgacc ctggaagggtg ccactccac 420

<210> 65  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Splice junction sequence

<400> 65  
 atgttccagg gcgtgatgat

20

<210> 66  
 <211> 7  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> C terminal residus from glutathione-S- tranferase

<400> 66  
 Asp Tyr Lys Asp Asp Asp Lys  
 1 5

<210> 67  
 <211> 15  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Artificial sequence comprising sequences derived  
 from Esherichia coli lacZ gene sequences

<400> 67  
 ggagttgatc ccgtc

15

<210> 68  
 <211> 37  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Artificial sequence comprising sequences derived  
 from Esherichia coli lacZ gene sequences

<400> 68  
gcagtgtcct tgtgcgggta ccctgcaggg cggcttc

37

<210> 69  
<211> 120  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Binding domain of PTM

<400> 69  
gattcacttg ctccaattat catcctaagc agaagtgtat attcttattt gttaaagattc 60  
tattaactca tttgattcaa aatattttaa atacttcctg tttcatactc tgctatgcac 120

<210> 70  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Spacer sequence of PTM

<400> 70  
aacattatta taacgttgct cgaa

24

<210> 71  
<211> 47  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Branch point, pyrimidine tract and acceptor splice  
site of PTM

<400> 71  
tactaactgg tacctcttct tttttttttg atatcctgca gggcggc

47

<210> 72  
<211> 70  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Donor site and spacer sequence of PTM

<400> 72  
tgaacggtaa gtgttatcac cgatatgtgt ctaacctgat tcgggccttc gatacgctaa 60  
gatccaccgg 70



<210> 73  
<211> 260  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Binding domain of spacer sequence

<400> 73  
tcaaaaagtt ttcacataat ttcttacctc ttcttgaatt catgctttga tgacgcttct 60  
gtatctatat tcatcattgg aaacaccaat gatttttctt taatggtgcc tggcataatc 120  
ctggaaaact gataacacaa tgaaattctt ccaactgtgct taaaaaaacc ctcttgaatt 180  
ctccatttct ccataatca tcattacaac tgaactctgg aaataaaaacc catcattatt 240  
aactcattat caaatcacgc 260

<210> 74  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 74  
cgctggaaaa acgagcttgt tg 22

<210> 75  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 75  
actcagtgtg attccacctt ctc 23

<210> 76  
<211> 36  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 76  
gacctctgca gacttcactt ctaatgatga ttatgg 36

<210> 77

<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 77  
ctaggatccc gttcttttgt tcttcactat taa

33

<210> 78  
<211> 33  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 78  
ctagggttac cgaagtaaaa ccatacttat tag

33

<210> 79  
<211> 35  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 79  
gcatgggttac cctgcagggg ctgctgctgt tgctg

35

<210> 80  
<211> 37  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 80  
ctgaaagctt gttaaccagc tcaccatggt ggggcag

37

<210> 81  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Binding domain of PTM molecule

<400> 81  
acccatcatt attaggtcat tat 23

<210> 82  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 82  
gatcaaattct gtcgatacctt cc 22

<210> 83  
<211> 21  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 83  
ctgatccacc cagtcccatt a 21

<210> 84  
<211> 22  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide primer

<400> 84  
gactgatcca cccagtccca ga 22

<210> 85  
<211> 52  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Random sequence inserted to replace the 3' splice  
site.

<221> misc\_feature  
<222> (7)...(30)  
<223> Spacer sequence, see SEQ ID NO: 70

<221> unsure

<222> (7)...(30)

<223> A, C, G or T

<400> 85

ccgcggnnnn nnnnnnnnnn nnnnnnnnnn gggttccggt accggcggct tc 52

<210> 86

<211> 71

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 86

ttttatcccc gtttacaggg cggcttcgctc tgggactggg tggatcagtc gctgattaaa 60  
tatgatgaaa a 71

<210> 87

<211> 66

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 87

tttggcgata cgccgaacga tcgccagttc tgtatgaacg gtctggtctt tgccgaccgc 60  
acgccg 66

<210> 88

<211> 192

<212> DNA

<213> Artificial Sequence

<220>

<223> PTM sequence

<400> 88

acgagcttgc tcatgatgat catgggcgag ttagaaccaa gtgaaggcaa gatcaaacad 60  
tccggccgca tcagcttttg cagccaattc agttggatca tgcccggtac catcaaggag 120  
aacataatct tcggcgctcag ttacgacgag taccgctatc gctcggtgat taaggcctgt 180  
cagttggagg ag 192

<210> 89

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 89

gagcaggcaa gacgagcttg ctcat

25

<210> 90

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 90

gagaacataa tcttcggcgt cagttacg

28

<210> 91

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 91

gtcagttgga ggaggacatc tccaagtttg

30

<210> 92

<211> 192

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 92

acgagcttgc tcatgatgat catgggcgag ttagaaccaa gtgaaggcaa gatcaaacad 60  
tccggccgca tcagcttttg cagccaattc agttggatca tgcccggtag catcaaggag 120  
aacataatct tcggcgctcag ttacgacgag taccgctatc gtcggtgat taaggcctgt 180  
cagttggagg ag 192

<210> 93

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> PTM sequences

<400> 93  
aaatatcatt ggtgtttctt atgatga

27

<210> 94  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 94  
ccaactagaa gaggacatct ccaagtttgc

30

<210> 95  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 95  
atgatcatgg gcgagttaga accaagtgg

30

<210> 96  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 96  
aaaatatcat ctttggtggt tcctatg

27

<210> 97  
<211> 27  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 97  
ccaactagaa gaggacatct ccaagtt

27

<210> 98  
<211> 21  
<212> DNA

<213> Artificial Sequence

<220>

<223> 5' splice site

<400> 98

cgtttacagg taagtggatc c

21

<210> 99

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> 3' splice site

<400> 99

ctgcaggcg gcttcgtcta ataatgg

27

<210> 100

<211> 65

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence from trans-splicing domain

<221> unsure

<222> (7)...(18)

<223> A, C, G or T

<400> 100

gctagcnnnc cgcggnnta ctaactggta cctcttcttt tttttttgat atcctgcagg 60  
gcggc 65

<210> 101

<211> 1584

<212> DNA

<213> Artificial Sequence

<220>

<223> CFTR PTM

<400> 101

atgcagaggt cgcctctgga aaaggccagc gttgtctcca aacttttttt cagctggacc 60  
agaccaattt tgaggaaagg atacagacag cgcctggaat tgtcagacat ataccaaadc 120  
ccttctgttg attctgctga caatctatct gaaaaattgg aaagagaatg ggatagagag 180  
ctggcttcaa agaaaaatcc taaactcatt aatgcccttc ggcgatgttt tttctggaga 240  
tttatgttct atggaatctt tttatattta ggggaagtca ccaaagcagt acagcctctc 300  
ttactgggaa gaatcatagc ttcctatgac ccggataaca aggaggaacg ctctatcgcg 360

|            |            |             |            |            |             |      |
|------------|------------|-------------|------------|------------|-------------|------|
| atttatctag | gcataggctt | atgccttctc  | tttattgtga | ggacactgct | cctacaccca  | 420  |
| gccatttttg | gccttcatca | cattggaatg  | cagatgagaa | tagctatggt | tagtttgatt  | 480  |
| tataagaaga | ctttaaagct | gtcaagccgt  | gttctagata | aaataagtat | tggacaactt  | 540  |
| gttagtctcc | tttccaacaa | cctgaacaaa  | tttgatgaag | gacttgcatt | ggcacatttc  | 600  |
| gtgtggatcg | ctcctttgca | agtggcactc  | ctcatggggc | taatctggga | gttggttacag | 660  |
| gcgtctgcct | tctgtggact | tggtttcttg  | atagtccttg | ccctttttca | ggctgggcta  | 720  |
| gggagaatga | tgatgaagta | cagagatcag  | agagctggga | agatcagtga | aagacttggt  | 780  |
| attacctcag | aaatgatcga | gaacatccaa  | tctgttaagg | catactgctg | ggaagaagca  | 840  |
| atggaaaaaa | tgattgaaaa | cttaagacaa  | acagaactga | aactgactcg | gaaggcagcc  | 900  |
| tatgtgagat | acttcaatag | ctcagccttc  | ttcttctcag | ggttctttgt | ggtgttttta  | 960  |
| tctgtgcttc | cctatgcact | aatcaaagga  | atcatcctcc | ggaaaatatt | caccaccatc  | 1020 |
| tcattctgca | ttgttctgcg | catggcggtc  | actcggcaat | ttccctgggc | tgtacaaaca  | 1080 |
| tggatgact  | ctcttgagac | aataaacaaa  | atacaggatt | tcttacaaaa | gcaagaatat  | 1140 |
| aagacattgg | aatataactt | aacgactaca  | gaagtagtga | tggagaatgt | aacagccttc  | 1200 |
| tgggaggagg | gatttgggga | attatttgag  | aaagcaaaac | aaaacaataa | caatagaaaa  | 1260 |
| acttctaagt | gtgatgacag | cctcttcttc  | agtaatttct | cacttcttgg | tactcctgtc  | 1320 |
| ctgaaagata | ttaatttcaa | gatagaaaga  | ggacagttgt | tggcggttgc | tggatccact  | 1380 |
| ggagcaggca | agacgagctt | gctcatgatg  | atcatgggcg | agttagaacc | aagtgaaggc  | 1440 |
| aagatcaaac | attccggccg | catcagcttt  | tgcagccaat | tcagttggat | catgcccggt  | 1500 |
| accatcaagg | agaacataat | cttcggcgctc | agttacgacg | agtaccgcta | tcgctcggtg  | 1560 |
| attaaggcct | gtcagttgga | ggag        |            |            |             | 1584 |

<210> 102

<211> 323

<212> DNA

<213> Artificial Sequence

<220>

<223> Trans-splicing domain of CFTR PTM

<400> 102

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| gtaagatatc | accgatatgt | gtctaacctg | attcgggcct | tcgatacgct | aagatccacc | 60  |
| ggtcaaaaag | ttttcacata | atttcttacc | tcttcttgaa | ttcatgcttt | gatgacgctt | 120 |
| ctgtatctat | attcatcatt | ggaaacacca | atgatatatt | ctttaatggt | gcctggcata | 180 |
| atcctggaag | actgataaca | caatgaaatt | cttcactgtg | gcttaatttt | accctctgaa | 240 |
| ttctccattt | ctcccataat | catcattaca | actgaactct | ggaaataaaa | cccatcatta | 300 |
| ttaactcatt | atcaaatcac | gct        |            |            |            | 323 |

<210> 103

<211> 165

<212> DNA

<213> Artificial Sequence

<220>

<223> PTM binding domain

<400> 103

|             |            |             |            |            |             |     |
|-------------|------------|-------------|------------|------------|-------------|-----|
| gctagcaata  | atgacgaagc | cgccccctcac | gctcaggatt | cacttgcctc | caattatcat  | 60  |
| cctaagcaga  | agtgtatatt | cttattttgta | aagattctat | taactcattt | gattcaaaaat | 120 |
| atttaaaaata | cttcctgttt | cacctactct  | gctatgcacc | cgcgg      |             | 165 |



<210> 104  
<211> 225  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Trans-splicing domain of PTM

<400> 104  
aataatgacg aagccgcccc tcacgctcag gattcacttg ccctccaatt atcatcctaa 60  
gcagaagtgt atattccttat ttgtaaagat tctattaact catttgattc aaaatatatta 120  
aaatacttcc tgtttcacct actctgctat gcacccgcgg aacattatta taacgttgct 180  
cgaatactaa ctggtacctc ttcttttttt tttgatatcc tgcag 225

<210> 105  
<211> 3069  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> CFTR PTM sequence

<400> 105  
acttcacttc taatgatgat tatgggagaa ctggagcctt cagagggttaa aattaagcac 60  
agtggaagaa tttcattctg ttctcagttt tcttgatta tgcctggcac cattaaagaa 120  
aatatcatct ttggtgtttc ctatgatgaa tatagataca gaagcgtcat caaagcatgc 180  
caactagaag aggacatctc caagtttgca gagaaagaca atatatgttct tggagaaggt 240  
ggaatcacac tgagtggagg tcaacgagca agaatttctt tagcaagagc agtatacaaaa 300  
gatgctgatt tgtattttatt agactctcct tttggatacc tagatgtttt aacagaaaaa 360  
gaaatatttg aaagctgtgt ctgtaaactg atggctaaca aaactaggat tttggtcact 420  
tctaaaatgg aacattttaa gaaagctgac aaaatattaa ttttgcata aggtagcagc 480  
tatttttatg ggacattttc agaactccaa aatctacagc cagactttag ctcaaaaactc 540  
atgggatgtg attcttttca ccaatttagt gcagaaagaa gaaattcaat cctaactgag 600  
accttacacc gtttctcatt agaaggagat gctcctgtct cctggacaga aacaaaaaaa 660  
caatctttta aacagactgg agagtttggg gaaaaaagga agaattctat tctcaatcca 720  
atcaactcta tacgaaaatt ttccattgtg caaaagactc cttacaaat gaatggcatc 780  
gaagaggatt ctgatgagcc tttagagaga aggctgtcct tagtaccaga ttctgagcag 840  
ggagaggcga tactgcctcg catcagcgtg atcagcactg gccccacgct tcaggcacga 900  
aggaggcagt ctgtcctgaa cctgatgaca cactcagtta accaagggtca gaacattcac 960  
cgaaagacaa cagcatccac acgaaaagtg tcaactggccc ctcaggcaaa cttgactgaa 1020  
ctggatatat attcaagaag gttatctcaa gaaactggct tggaaataag tgaagaaatt 1080  
aacgaagaag acttaaagga gtgctttttt gatgatatgg agagcatacc agcagtgact 1140  
acatggaaca cataccttcg atatattact gtccacaaga gcttaatttt tgtgctaatt 1200  
tggtgcttag taatttttct ggcagaggtg gctgcttctt tggttgtgct gtggctcctt 1260  
ggaaacactc ctcttcaaga caaaggggaat agtactcata gtagaaataa cagctatgca 1320  
gtgattatca ccagcaccag ttctgtattat gtgttttaca tttacgtggg agtagccgac 1380  
actttgcttg ctatgggatt cttcagaggt ctaccactgg tgcatactct aatcacagtg 1440  
tcgaaaattt tacaccacaa aatgttacat tctgttcttc aagcacctat gtcaaccctc 1500  
aacacgttga aagcaggtgg gattcttaat agattctcca aagatatagc aatttttggat 1560

|             |            |             |             |             |            |      |
|-------------|------------|-------------|-------------|-------------|------------|------|
| gaccttctgc  | ctcttaccat | atttgacttc  | atccagttgt  | tattaattgt  | gattggagct | 1620 |
| atagcagttg  | tcgcagtttt | acaaccctac  | atctttgttg  | caacagtgcc  | agtgatagtg | 1680 |
| gctttttatta | tggtgagagc | atatttcctc  | caaaccctcac | agcaactcaa  | acaactggaa | 1740 |
| tctgaaggca  | ggagtccaat | tttcaactcat | cttggttaca  | gcttaaaagg  | actatggaca | 1800 |
| cttcgtgcct  | tcggacggca | gccttacttt  | gaaactctgt  | tccacaaagc  | tctgaattta | 1860 |
| catactgcc   | actggttctt | gtacctgtca  | acactgcgct  | ggttccaaat  | gagaatagaa | 1920 |
| atgatttttg  | tcatcttctt | cattgctggt  | accttcattt  | ccatttttaac | aacaggagaa | 1980 |
| ggagaaggaa  | gagttggtat | tatcctgact  | ttagccatga  | atatcatgag  | tacattgcag | 2040 |
| tgggctgtaa  | actccagcat | agatgtggat  | agcttgatgc  | gatctgtgag  | ccgagtcctt | 2100 |
| aagttcattg  | acatgccaac | agaaggtaaa  | cctaccaagt  | caaccaaacc  | atacaagaat | 2160 |
| ggccaactct  | cgaaagttat | gattattgag  | aattcacacg  | tgaagaaaga  | tgacatctgg | 2220 |
| ccctcagggg  | gccaaatgac | tgtcaaagat  | ctcacagcaa  | aatacacaga  | aggtggaaat | 2280 |
| gccatattag  | agaacatttc | cttctcaata  | agtccctggc  | agaggggtgg  | cctcttgggg | 2340 |
| agaactggat  | cagggaagag | tactttgtta  | tcagcttttt  | tgagactact  | gaacactgaa | 2400 |
| ggagaaatcc  | agatcgatgg | tgtgtcttgg  | gattcaataa  | ctttgcaaca  | gtggaggaaa | 2460 |
| gcctttggag  | tgataccaca | gaaagtattt  | attttttctg  | gaacatttag  | aaaaaacttg | 2520 |
| gatccctatg  | aacagtggag | tgatcaagaa  | atatggaaag  | ttgcagatga  | ggttgggctc | 2580 |
| agatctgtga  | tagaacagtt | tcctgggaag  | cttgactttg  | tccttgtgga  | tgggggctgt | 2640 |
| gtcctaagcc  | atggccacaa | gcagttgatg  | tgcttggcta  | gatctgttct  | cagtaaggcg | 2700 |
| aagatcttgc  | tgcttgatga | accagtgct   | catttgatc   | cagtaacata  | ccaaataatt | 2760 |
| agaagaactc  | taaaacaagc | atttgcgtgat | tgcacagtaa  | ttctctgtga  | acacaggata | 2820 |
| gaagcaatgc  | tggaatgcca | acaatttttg  | gtcatagaag  | agaacaaagt  | gcggcagtac | 2880 |
| gattccatcc  | agaaactgct | gaacgagagg  | agcctcttcc  | ggcaagccat  | cagcccctcc | 2940 |
| gacaggggtga | agctctttcc | ccaccggaac  | tcaagcaagt  | gcaagtctaa  | gccccagatt | 3000 |
| gctgctctga  | aagaggagac | agaagaagag  | gtgcaagata  | caaggcttca  | tcatcatcat | 3060 |
| catcattag   |            |             |             |             |            | 3069 |

<210> 106

<211> 131

<212> DNA

<213> Artificial Sequence

<220>

<223> Binding domain of mouse factor VIII PTM

<400> 106

|            |            |             |            |            |            |     |
|------------|------------|-------------|------------|------------|------------|-----|
| ctcgagctta | cctgaactaa | tttttttagaa | tattaaaatc | ctaagctttt | atatctctat | 60  |
| ccctctatct | tttgctctct | atccaatttt  | tattaactta | gactttaaaa | agaaacttat | 120 |
| gagaaaaatt | t          |             |            |            |            | 131 |

<210> 107

<211> 71

<212> DNA

<213> Artificial Sequence

<220>

<223> Spacer sequence of PTM

<400> 107

|            |            |            |            |            |            |    |
|------------|------------|------------|------------|------------|------------|----|
| ccgcggaaca | ttattataac | gttgctcgaa | tactaactgg | tacctcttct | tttttttttg | 60 |
|------------|------------|------------|------------|------------|------------|----|

atatacctgca g

<210> 108

<211> 527

<212> DNA

<213> Artificial Sequence

<220>

<223> Chicken beta actin promoter sequences

<400> 108

```
ccatgggtcga cgtttagcccc acgtttctgct tcactctccc catctccccc ccttccccac 60
ccccaatttt gtatttatatt attttttaat tattttgtgc agcgatgggg gcgggggggg 120
gggggggggcg cgcgccaggc ggggcggggc ggggcgaggg gcggggcggg gcgaggcgga 180
gaggtgcggc ggcagccaat cagagcggcg cgctccgaaa gttcctttta tcgagaggcg 240
gcggcgggcg cggccctata aaaagcgaag cgcgcggcg cggggagtcg ctgcgacgct 300
gccttcgccc cgtgccaacc tccgcctcga gcttacctga actaattttt tagaatatta 360
aaatcctaag cttttatact cctatccctc tatcttttgc tctctatcca atttttatta 420
acttagactt taaaaagaaa cttatgagaa aaatttcgc ggaacattat tataacgttg 480
ctcgaatact aactggtacc tcttcttttt tttttgatat cctgcag 527
```

<210> 109

<211> 169

<212> DNA

<213> Artificial Sequence

<220>

<223> Sequence not included in construct

<400> 109

```
cgccgcctcg cgccgcccgc cccggctctg actgaccgcg ttactccac aggtgagcgg 60
gcgggacggc ccttctcctc cgggctgtaa ttagcgcttg gtttaatcac ggcttgtttc 120
ttttctgtgg ctgcgtgaaa gccttgaggg gctccgggag gaattcgta 169
```

<210> 110

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> F8 PTM sequences

<400> 110

```
ggagtcgctg cgacgctgcc ttgcggcggc gccaacctcc gc
```

42

<210> 111

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> F8 PTM sequences

<400> 111

ctcgagcacc gatatcgtaa ct

22

<210> 112

<211> 53

<212> DNA

<213> Artificial Sequence

<220>

<223> Exon 26, Flag tag, stop sequences of mouse factor  
VIII PTM

<400> 112

gaggcccagc agcaatacga ctacaaggac gacgatgaca agtgagttaa aac

53

<210> 113

<211> 71

<212> DNA

<213> Artificial Sequence

<220>

<223> Spacer sequences of human or canine factor VIII  
PTM

<400> 113

ccgcggaaca ttattataac gttgctcgaa tactaactgg tacctcttct tttttttttg 60  
atatacctgca g 71